MANASVI MANKAL

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in **Manasvi Mankal** | **Man-asvi** | **Portfolio**

SUMMARY

Aspiring Data Scientist & Software Engineer passionate about developing AI-driven applications and scalable software solutions. Skilled in Machine Learning, MERN Stack, and Algorithm Optimization, with hands-on experience in API integration, full-stack development, and data analytics. Proficient in building data-driven models, enhancing system efficiency, and creating innovative solutions for complex challenges. Committed to continuous learning and staying ahead of emerging trends in AI and software engineering.

EDUCATION

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY   (2022 - 2026)
Bachelor of Engineering - Artificial Intelligence and Data Science   CGPA - 8.77

SKILLS

Programming Languages: Python, Java, R Programming
Data Science, Machine Learning & Deep Learning: Deep Learning (CNN, RNN, Transfer Learning), Machine Learning, Data Science, Data Visualization, SQL
Frameworks & Libraries: TensorFlow, Keras, PyTorch, Scikit-learn, Pandas, NumPy, Matplotlib
Computer Science Basics: Data Structures & Algorithms(DSA), Linux Commands, Operating System(OS)
MERN Stack: MongoDB, ExpressJS, React, NodeJS
Web Development: HTML, CSS
Version Control: Git & GitHub
Soft Skills: Presentation, Teamwork & Collaboration, Time Management, Adaptability, Problem Solving

PROJECTS

ASCENTIA
Self-Growth Application using MERN Stack and AI Assistant

- Developed Ascentia, a gamified self-development tool enabling users to create tasks and earn points (XP) upon completion, implemented using the MERN stack for a full-stack application experience.
- Integrated visual graphs to display user performance and AI-driven challenges for personalized task recommendations, showcasing strong expertise in full-stack development and gamification techniques.
- Added an AI-powered chatbot leveraging Retrieval-Augmented Generation (RAG), enabling users to create tasks and retrieve task history through natural language prompts, ensuring intelligent and contextually relevant task management.

EMOTION RECOGNITION
Deep Learning Model for Real-time Facial Emotion Classification

- Developed a robust emotion recognition system utilizing deep learning techniques to accurately classify facial expressions into various emotional categories (e.g., happy, sad, angry, neutral).
- Leveraged and fine-tuned state-of-the-art pre-trained models like ResNet and Mini Xception, demonstrating expertise in transfer learning, model adaptation, and optimizing CNN architectures for image classification tasks.
- Achieved high accuracy in identifying human emotions from facial images, showcasing strong proficiency in applying advanced deep learning concepts for real-world computer vision applications.

GESTURE RECOGNITION
Real-time Hand Gesture Classification System for Interactive Control

- Developed a dynamic gesture recognition system capable of accurately interpreting various hand movements and classifying them into predefined gestures for interactive applications.
- Implemented computer vision techniques, including image processing and feature extraction, to identify key patterns in hand gestures, demonstrating strong skills in visual data analysis.
- Showcased the application of machine learning algorithms for real-time gesture classification, enabling intuitive and touchless control interfaces.

CBIT AI ASSISTANT
AI Assistant For College Website

- Engineered a specialized AI assistant for Chaitanya Bharathi Institute of Technology (CBIT), leveraging the Google Gemini API to deliver precise, context-aware responses from a curated knowledge base.
- Designed and implemented a sophisticated prompt engineering framework to ground the AI's knowledge, strictly constraining responses to verified institutional documents to ensure high factual accuracy and prevent off-topic answers.
- Developed a fully responsive and interactive chat interface using React, TypeScript, and TailwindCSS, architecting a component-based system for managing asynchronous API states and creating a seamless user experience for accessing information.

CERTIFICATION

DATABRICKS FUNDAMENTALS ACCREDITATION (2026)
CERTIFIED AWS CLOUD PRACTITIONER (2026)
JAVA FULL STACK CERTIFICATION FROM UDEMY (2024)
FOUNDATION IN ARTIFICIAL INTELLIGENCE & MACHINE LEARNING CERTIFICATION (2024)
AMCAT CERTIFICATION (2025)
Scored 90+ percentile in all sections, demonstrating strong problem-solving and coding ability

HACKATHONS

AI/ML HACKATHON - 2025

Developed an AI Tool to Convert Natural Language to SQL Queries, enabling non-technical users to extract information from relational databases seamlessly.

HACKTOBER 24-HOUR HACKATHON - 2024

Built an AI-powered Outfit Recommendation System that analyzed user-uploaded wardrobe images and suggested combinations using image classification.

AMAZON SUSTAINABILITY HACKATHON – SEASON 5 -2025

Proposed tech-driven solutions to enhance sustainability by minimizing packaging waste and optimizing delivery logistics. Developed a Sustainability Store concept that scores products based on material and manufacturing processes to promote eco-friendly choices.

SMART INDIA HACKATHON - 2023

Developed a web-based solution to predict student dropouts by analyzing demographic and academic data. Visualized a state-wise dropout heatmap of India categorized by reasons such as gender, economic status, and education level. Proposed actionable solutions to reduce dropout rates through targeted interventions.

SMART INDIA HACKATHON - 2024

Created an interactive ocean pollution awareness game using intuitive design to educate users on conservation. Integrated story-based decision-making features where players navigate real-life scenarios and make choices impacting the virtual marine ecosystem, enhancing engagement and environmental understanding.

ACHIEVEMENTS

Runner-Up in Project Expo for Ascentia, a gamified self-development tool built using the MERN stack.
Solved 250+ problems on LeetCode, demonstrating strong problem-solving and data structures & algorithms proficiency.